DOCUMENT RESUME

ED 341 177 EC 300 850

AUTHOR Lederberg, Amy R.; And Others
TITLE A Longitudinal Study of the Effects of Deafness on the Early Mother-Child Relationship.
PUB DATE Apr 91
NOTE 7p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Seattle, WA, April 18-21, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Behavior Patterns; Behavior Problems; *Deafness; Infants; *Interaction Process Analysis; *Interpersonal Competence; Longitudinal Studies; *Mothers; *Parent Child Relationship; Personality Traits; Social Behavior; Social Development; Young Children

ABSTRACT

Thirty-three deaf and 33 hearing children were videotaped playing with their hearing mothers at 22 months and 3 years of age. The deaf and hearing dyads differed at 22 months only on communicative competence. In addition, interactions in deaf dyads were mother dominated and less harmonious than in hearing dyads. At 3 years, the deaf children also showed less social initiative, social compliance, enjoyment, creativity, and on-task behavior and more misbehavior than hearing children. (Author/DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED341177

A Longitudinal Study of the Effects of Deafness on the Early Mother-Child Relationship

Amy R. Lederberg, Madge G. Willis, and Kathryn H. Frankel

Department of Educational Foundations

Georgia State University

Atlanta, GA 30303

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Amy R. Lederberg

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Poster presented at the bienniel meetings of the Society for Research in Child Development, Seattle, WA, April 1991. This research was partially supported by grants from the Office of Special Education ($265,035 or 76% of cost) and the March of Dimes Foundation to the first author.

BEST COPY AVAILABLE

Abstract

The results of this study show that the impact of a deaf child on the quality of the mother-child relationship increases dramatically during the preschool years. Thirty-three deaf and 33 hearing children were videotaped playing with their hearing mothers at 22 months and 3 years of age. The deaf and hearing dyads differed at 22 months only on communicative competence. At 3 years of age, deaf dyads continued to show poorer communicative competence. In addition, interaction in deaf dyads were more mother-dominated and less harmonious than in hearing dyads. During interaction with their hearing mothers, deaf 3-year-olds also showed less social initiative, social compliance, enjoyment, creativity, and on-task behavior and more misbehavior than hearing children. These findings may be due to a developmental change in the importance of language for normal mother-child interaction.

The purpose of this study was to examine developmental changes in the effect of child deafness on the mother-preschool child relationship. Lederberg and Mobley (1991) found that, although child deafness affected communication between 22-month-old toddlers and their mothers, it did not affect the mother-toddler relationship in a major way. This result is in contrast to previous research that found a disruption in deaf preschoolers' relationships with their mother (e.g., Meadow, Greenberg, Erting, & Carmichael, 1981; Schlesinger & Meadow, 1972). These different results may be due to an increase in the impact of child deafness as the child grows older (developmental changes) or to differences in the characteristics of the hearing impaired children studied (population differences). To explore this issue, the present study reassessed the mother-child relationship of the children studied by Lederberg and Mobley when the children were 3 years of age. Compared to past research, where preschool subjects ranged in age from 3 to 5 years, this study can more precisely pinpoint the age that child deafness starts to impact the mother-child relationship.

Subjects: Thirty-three deaf and 33 hearing children and their mothers served as subjects. The deaf/hearing dyads were matched on sex of child, ethnicity, and maternal marital status, work status, and education.

Method: Each mother-child dyad was videotaped during 15 min free play and 5 min problem-solving (puzzle completion) sessions when the child was 22 months and 3 years old.

From the videotapes, the quality of mother-child interaction was rated using 5 point Likert scales. One team of coders rated the dyads' communicative competence and maternal behavior for the following dimensions: didactiveness,

directiveness, stimulation value, intrusiveness, pacing, developmental appropriateness of play, negative affect, and positive reinforcement. A second team of coders rated child behavior along the following dimensions: social initiative, social responsiveness, affective sharing, positive and negative affect, attention span, object initiative, pride in mastery, creativity, misbehavior, and on-task behavior during the problem-solving situation. They also rated the dyad for mother/child dominance and mutality. Interrater reliability (based on 25% of tapes) ranged from = .71 to 1.00.

Results: A series of 2 (child hearing status) X 2 (child age) repeated measures ANOVAs were conducted. Whenever there was a significant interaction, the effect of child hearing status for each age was tested using planned comparisons. Table 1 displays the ratings that showed significant differences. As expected, there was a significant interaction between child deafness and child age for many of the rating scales. As reported by Lederberg and Mobley, the deaf and hearing dyads differed at 22 months only on communicative competence. In contrast, deaf 3-year-olds showed significantly less social initiative, social compliance/responsiveness, enthusiasm and interest (affect sharing), creative play and more misbehavior while playing with their mothers than did hearing 3-year-olds. In addition, during the puzzle task, the deaf 3-year-olds showed less on-task behavior (task orientation) and less enthusiasm (affect) than did hearing 3-year-olds. During free play, the deaf dyads showed less communicative competence, less harmonious interaction (mutuality), and more maternal dominance than hearing dyads. Deafness did not affect maternal ratings.

The findings suggest that child deafness begins to dramatically impact on the quality of mother-child interaction between 22 months and 3 years of age.

This impact seems primarily on the children's behavior not the mothers'. We are now exploring some possible sources for this impact, including a widing gap in language skills, maternal stress, and the deaf children's inability to divide their visual attention between the environment and their mothers. The results suggest that at a time when school support to parents is decreasing (as the children enter center-based programs and leave parent education programs), such support should be increasing.

References

Lederberg, A. R., & Mobley, C. E. (1990). The effect of hearing impairment on the quality of attachment and mother-toddler interaction. Child Development, 61, 1596-1604..

Meadow, K. P., Greenberg, M. T., Erting, C., & Carmichael, H. (1981). Interactions of deaf mothers and deaf preschool children: Comparisons with three other groups of deaf and hearing dyads. American Annals of the Deaf, 126, 454-568.

Schlesinger, H. S., & Meadow, K. P. (1972). Sound and Sign: Childhood Deafness and Mental Health. Berkely, CA: University of California Press.

Table 1. Mean Scores and Significance Levels of ANOVAs and Planned Comparisons for Hearing and Deaf Children

Scales	Age	Children: Deaf	Children: Hearing	Planned Comparisons*	ANOVA Significance
CHILD RATINGS					
Social Initiative	22 mos.	2.9	2.9	n.s.	Hearing
	3 yrs.	2.8	3.8	***	Hearing x Age
Social Responsivity	22 mos.	3.4	3.5	n.s.	Hearing
	3 yrs.	2.6	4.1	***	Hearing x Age
Affect Sharing	22 mos.	3.6	4.0	*	Hearing
	3 yrs.	3.3	3.8	**	Age
Creative	22 mos.	2.1	2.2	n.s.	Hearing
	3 yrs.	3.6	4.3	**	Age
					Hearing x Age
Misbehavior	22 mos.	1.0	1.3	n.s.	Age
	3 yrs.	.8	.4	**	Hearing x Age
Task Orientation	22 mos.	3.5	3.2	n.s.	Hearing x Age
	3 yrs.	2.7	3.4	*	
Affect	22 mos.	3.8	3.9	n.s.	Hearing
	3 yrs.	3.4	4.1	**	Hearing x Age
DYADIC RATINGS					
Communicative Competence	22 mos.	2.7	3.5		Hearing
	3 yrs.	2.4	4.6		
Mutuality	22 mos.	3.6	3.8	n.s.	Hearing
	3 yrs.	2.9	3.7	***	Age
					Hearing x Age
Domination of Interaction	22 mos.	5.1	5.3	n.s.	Age
	3 yrs.	3.4	2.9	*	Hearing x Age

* Significant effects of child deafness within each age
* $p < .05$ ** $p < .01$ *** $p < .001$